Amendments to the claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

 (Previously presented) A method of release planning, the method comprising: assigning stakeholder priorities to a set of requirements, where the priorities are assigned by plural stakeholders;

explicitly defining a set of constraints on the requirements; and

generating a set of release plan solutions using algorithms carried out by a computer for evaluation together, each release plan solution of the set of release plan solutions satisfying the constraints, balancing between stakeholder priorities of different stakeholders, and having a positive impact, measured by objective criteria, on at least one of project time, overall cost and quality.

2. (Previously presented) The method of claim 1 in which generating is carried out repeatedly after changing one or more of the constraints, requirements, objective criteria, or stakeholder priorities.

3.-7. (Cancelled)

8. (Previously presented) The method of claim 2 in which changing comprises actions chosen from a group consisting of:

adding additional requirements; removing existing requirements; modifying existing requirements; and adjusting stakeholder priorities.

9. (Previously presented) The method of claim 2 further comprising assigning the requirements to one of the next release, the next but one release, or unassigned.

10. (Previously presented) The method of claim 9 in which repeating the generation of a set of release plan solutions comprises using the unassigned requirements as the requirements in the next generation of a set of release plan solutions.

11. - 12. (Cancelled)

- 13. (Original) The method of claim 1 in which the set of constraints is chosen from a group consisting of precedence relationships between requirements, coupling relationships between requirements, effort, resource, budget, risk, and time.
- 14. (Original) The method of claim 1 in which stakeholder priorities are represented by a numerical value representing stakeholder satisfaction that a requirement be assigned to one of three categories, the categories consisting of the next release, the next but one release, and postponed.
- 15. (Original) The method of claim 1 in which the requirements are grouped into groups of requirements and the algorithms balance between stakeholder priorities assigned to the groups of requirements.
- 16. (Original) The method of claim 1 in which stakeholders prioritize subsets of the complete set of requirements.

17. (Cancelled)

18. (Previously presented) The method of claim 1 where the set of release plan solutions generated are a set of maximally distinct alternative release plan solutions where for each plan the guaranteed degree of optimality is known.

19-20. (Cancelled)

- 21. (Previously presented) A computer programmed to carry out the method of claim 1.
- 22. (Previously presented) Computer readable media containing instructions for a computer to carry out the method of claim 1.
- 23. (Previously presented) The method of claim 1 in which the constraints comprise a measure of resource consumption.
- 24. (Previously presented) The method of claim 1 further comprising selecting at least one release plan solution from the set of candidate release plan solutions based on the positive impact of the at least one release plan solution.
- 25. (Previously presented) The method of claim 24 in which the algorithms comprise one or more of genetic algorithms, heuristic algorithms and integer programming algorithms.
- 26. (Previously presented) The method of claim 25 in which the algorithms use at least one objective function to evaluate release plan solutions.
- 27. (Previously presented) The method of claim 26 in which the objective function comprises an aggregation of stakeholder priorities or value estimates.
- 28. (Previously presented) The method of claim 27 in which computation of the algorithms is carried out externally from an application service provider, and stakeholder priorities are input to the computer from remote locations.